

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A data storage system that provides a single system interface ~~for multiple~~ for at least two data storage devices, wherein the data storage system communicates with ~~one or more client devices~~ at least one client device via a stateful protocol and wherein the data storage system redirects data requests received from the ~~one or more client devices~~ at least one client device to the ~~multiple~~ at least two data storage devices, the data storage system comprising:

a first data storage device of the at least two storage devices;

a second data storage device of the at least two storage devices; and

a dynamic session redirector in communication with the at least one client device via a stateful protocol, wherein the redirector is configured to act as the single system interface and establish at least a first stateful protocol session with the at least one client device in response to a request for access to at least one of the first data storage device or the second data storage device, and wherein subsequent to and in response to the establishment of the first stateful protocol session the dynamic session redirector is further configured to establish at least a second session with at least one of the first and second storage devices ~~in response to the establishment of the first session.~~

2. (original) A data storage system as in Claim 1 wherein the dynamic session redirector is further configured to establish at least a third session with at least one of the first and second storage devices in response to the establishment of the first session.

3. (original) A data storage system as in Claim 1 wherein the first and second storage devices comprise network attachable storage.

4. (currently amended) A data storage system as in Claim 1 wherein the redirector is further configured to establish a session with ~~[[the]]~~ a client using a stateless protocol.

5. (original) A data storage system as in Claim 1 wherein the first and second storage devices comprise storage resources which are connected to a storage area network.

6. (original) A data storage system as in Claim 1 further comprising a second dynamic session redirector in communication with the at least one client device via a stateful protocol, wherein the second redirector is configured to establish at least a third stateful protocol session with the at least one client device, the second dynamic session redirector configured to establish at least a fourth session with at least one of the first and second storage devices in the response to the establishment of the third session.

7. (original) A data storage system as in Claim 6 wherein the second redirector and the first redirector are connected to one another and exchange information related to the state of the first stateful protocol session.

8. (currently amended) A data storage system that provides a single system interface ~~for multiple~~ for at least two network data storage devices, wherein the data storage system communicates with at least one client device ~~one or more client devices~~ via a stateful protocol and wherein the data storage system redirects data requests received from the at least one client device ~~one or more client devices~~ ~~to the multiple~~ at least two network data storage devices, the data storage system comprising:

a first network ~~attachable~~ storage device of the at least two network data storage devices;

a second network ~~attachable~~ storage device of the at least two network storage devices; and

a dynamic session redirector connected to both the first and second network attachable storage devices and configured to communicate with the at least one client device via a stateful protocol, wherein the redirector is further configured to establish at least a first stateful protocol session with the at least one client device in response to a request for access to at least one of the first network storage device or the second network storage device, and wherein subsequent to and in response to the establishment of the first stateful protocol session, the dynamic session redirector~~[[also]]~~ further configured to establish separate network sessions with the first network attachable storage device and the second network ~~attachable~~ storage device ~~in response to the establishment of the first session.~~

9. (currently amended) The data storage system of Claim 8 wherein the dynamic session redirector further comprises a network switch, the first and second network ~~attachable~~ storage devices being connected to separate ports of the network switch.

10. (currently amended) The data storage system of Claim 8 wherein the at least one client device is unable to access the first or second network ~~attachable~~ storage devices except through the dynamic session redirector.

11. (original) The data storage system of Claim 7 wherein the redirector is configured to communicate with the at least one client device using both a stateful and a stateless protocol.

12. (currently amended) The data storage system of Claim 8 wherein the network sessions between the redirector and the first and second network attachable storage devices are made using a stateful protocol.

13. (currently amended) A data storage system providing a single system interface comprising:

a first storage device comprising at least a first storage resource;
a second storage device comprising at least a second storage resource; and

processor circuitry in communication with at least one data access device via a stateful protocol, wherein the processor circuitry is configured to establish at least a first stateful protocol connection with the data access device in response to a request received by the processor circuitry through the first connection for access to the first storage device or to the second storage device by the at least one data access device, and wherein subsequent to and in response to the establishment of the first stateful protocol connection, the processor circuitry is further configured to establish at least a second stateful protocol connection with at least one of the first and/or second storage devices ~~in response to a request from the at least one data access device for access to one of the first or second storage resources which is received by the processor circuitry through the first connection.~~

14. (original) A data storage system as in Claim 13 wherein the first storage device comprises a network attachable storage unit.

15. (original) A data storage system as in Claim 13 wherein the processor circuitry further comprises a table for storing information associated with the first stateful protocol connection.

16. (original) A data storage system as in Claim 13 wherein the processor circuitry further comprises a first network interface for sending and receiving information via the first stateful protocol session.

17. (original) A data storage system as in Claim 16 wherein the processor circuitry further comprises at least a second network interface for sending and receiving information from the first and second storage devices via the second connection.

18. (currently amended) A data storage system providing a single system interface comprising:

a first storage resource;

a second storage resource; and

a software module in communication with at least one data access device via a stateful protocol, wherein the software module is configured to establish at least a first stateful protocol connection with the data access device in response to a request received for access to the first storage resource or to the second storage resource by the at least one data access device, and wherein subsequent to and in response to the establishment of the first stateful protocol connection, the software module is further configured to establish at least a second stateful protocol connection with at least one of the first and/or the second storage resources ~~in response to the establishment of the first connection~~.

19. (original) A data storage system as in Claim 18 wherein the software module further comprises a table for storing information related to the at least first stateful protocol connection between the software module and the data access device.

20. (original) A data storage system as in Claim 18 wherein the software module is further configured to establish at least a third connection with at least one of the first and second storage resources in response to the establishment of the first connection.

21. (original) A data storage system as in Claim 20 wherein the software module is configured to receive data via both the second and third connections and is configured to prepare a response to the data access device based upon the data received via the second and third connections.

22. (original) A data storage system as in Claim 21 wherein the response to the data access device is sent via the at least first stateful protocol connection.

23. (currently amended) A data storage system that provides a single system interface for ~~multiple~~ at least two data storage resources, wherein the data storage system communicates with client devices via a stateful protocol and wherein the data storage system redirects data requests received from the client devices to one or more of the ~~multiple~~ at least two data storage resources, the data storage system comprising:

a first server;

a second server;

at least one client device;

at least one of the at least two storage resources connected to the first and second servers via a storage area network; and

a dynamic session redirector in communication with the at least one client device via a stateful protocol, wherein the redirector is configured to establish at least a first stateful protocol session with the at least one client device in response to a request received for access to at least one of the at least two storage resources by the at least one client device, and wherein subsequent to and in response to the establishment of the first stateful

protocol session, the dynamic session redirector is further configured to establish at least a second stateful protocol session with at least one of the first and second servers ~~in response to the establishment of the first session.~~

24. (currently amended) A data storage system that provides a single system interface for ~~multiple~~ at least two data storage resources, wherein the data storage system communicates with at least one client device[[s]] via a stateful network protocol and wherein the data storage system redirects data requests received from the at least one client device[[s]] to ~~multiple~~ the at least two data storage resources, the data storage system comprising:

a first front end device;

a second front end device;

a storage network hub connected to the first and second front end devices;

a first data storage resource of the at least two data storage resources connected to the storage network hub;

a second data storage resource of the at least two data storage resources connected to the storage network hub; and

a dynamic session redirector in communication with the at least one client device via a stateful protocol, wherein the redirector is configured to establish at least a first stateful protocol session with the at least one client device in response to a request received for access to at least one of the at least two storage resources by the at least one client device, and wherein subsequent to and in response to the establishment of the first stateful protocol session, the dynamic session redirector is further configured to establish at least a second stateful protocol session with the first front end device ~~in response to the establishment of the first session, and the dynamic session redirector further configured to establish~~ at least a third stateful protocol session with the second front end device ~~in response to the~~

~~establishment of the first session~~, the dynamic session redirector further configured to redirect data received from the first and second front end devices via the second and third stateful protocol sessions ~~connections~~ to the at least one client device via the first ~~connection~~ session.

25. (currently amended) A data storage system as in Claim 24 wherein the second and third ~~connections~~ sessions comprise communication sessions.

26. (currently amended) A data storage system as in Claim 24 wherein the second and third ~~connections~~ sessions comprise requests for access to one of the first or second storage resources.

27. (currently amended) A data storage system for providing a single system interface for ~~multiple~~ at least two data storage resources to at least one client[[s]] connecting to the data storage system across a network ~~via a stateful network protocol~~, the system comprising:

one or more servers connected via ~~the~~ a ~~communications~~ network;

a storage area network hub connected to the one or more servers;

one or more ~~raid~~ Redundant Array of Independent Disks (RAID)

subsystems connected to the storage area network hub and connected to the at least two data storage resources; and

~~a plurality of data storage resources connected to the one or more raid subsystems,~~

a dynamic session redirector connected to the one or more servers and configured to ~~provide a single system interface for accessing the plurality of data storage resources to a client connected to the data storage system, the redirector~~ and, in response to receiving from at least one client using stateful protocol a request for access to the at least two data storage resources, configured to receive requests from a client using a stateful protocol and to provide create a first communications session between the at

least one client and the redirector ~~in response to [[a]]the at least one request from the client~~; the redirector further configured to create a second communications session ~~[[to]]between the redirector and~~ at least one of the at least two data storage devices resources in response to ~~[[a]]the request~~ ~~[[for]] seeking access to that resource which is received through the first communications session~~, the redirector configured to receive data through the second communications session and to send this data to the at least one client through the first communications session.

28. (canceled)

29. (currently amended) A method of providing a single system interface for ~~multiple~~ at least two data storage devices, comprising:

receiving at the single system interface a request for data from at least one client device;

establishing at least a first stateful protocol session with the client device and the single system interface; and

establishing a second session with one of multiple storage devices and the single system interface in response to the establishment of the first stateful protocol session.

30. (currently amended) A method as in Claim 29 further comprising establishing a third session with a second of the multiple storage devices and the single system interface in response to the establishment of the first stateful protocol session.

31. (original) A method as in Claim 29 wherein the storage devices comprise network attachable storage devices.

32. (original) A method as in Claim 29 wherein the storage devices comprise storage resources connected to one another with a storage area network.

33. (original) A method as in Claim 29 further comprising storing state data for the first stateful protocol session with the client device, and wherein the step of establishing a second session further comprises using the stored state data to establish the second session.

34. (currently amended) A method of storing data comprising:
receiving at a single system interface a first request from a data access device via a first stateful protocol connection; ~~and~~
sending a second request from the single system interface to at least one of ~~multiple~~ at least two data storage devices via a second stateful protocol connection;
receiving at the single system interface a first response from the at least one of ~~multiple~~ the at least two data storage devices via the second stateful protocol connection; and
sending a second response to the data access device via the first stateful protocol connection wherein the second response is related to the first request.

35. (currently amended) A method as in Claim 34 further comprising sending a third request to at least a second of the ~~multiple-at least two~~ data storage devices via a third stateful protocol connection; and
receiving a third response from the at least second of the ~~multiple-at least two~~ data storage devices via the third stateful protocol connection.

36. (original) A method as in Claim 35 wherein responses from both the second and third connection are used to generate the third response which is sent to the data access device.

37. (original) A method as in Claim 34 wherein the second connection is made across a storage area network.

38. (original) A method as in Claim 34 wherein the multiple data storage devices comprise one or more disk arrays connected to a server.

39. (currently amended) A method for data storage comprising:
receiving data at a single system interface from a client device via a first stateful protocol network connection;
accessing at least one of ~~multiple~~ at least two storage resources by the single system interface via at least a second stateful protocol network connection; and
transferring the data from the single system interface to the least one of the ~~multiple~~ at least two storage resources via the second stateful protocol network connection.

40. (currently amended) A method as in Claim 39 further comprising
accessing at least a second of the ~~multiple~~ at least two storage resources by the single system interface via a third network stateful protocol connection; and
transferring at least a portion of the data from the single system interface to the second of the ~~multiple~~ at least two storage resources via the third stateful protocol network connection.

41. (currently amended) A method as in Claim 39 wherein the ~~multiple~~ at least two storage resources comprise network attachable storage devices.

42. (currently amended) A method as in Claim 39 wherein the ~~multiple~~ at least two storage resources comprise disk drives configured to be accessed via a storage area network.

43. (currently amended) A data storage method comprising:
establishing at least a first stateful protocol session between a communications device and at least one client device wherein the communications device comprises a dynamic session redirector which stores status information related to the first stateful protocol session; and
establishing a second stateful protocol session between the communications device and at least one storage area network in response to the establishment of the first stateful protocol session.

44. (currently amended) A method as in Claim 43 further comprising establishing a third stateful protocol session between the communications device and at the at least one storage area network in response to the establishment of the first stateful protocol session.

45. (canceled)

46. (currently amended) A method as in Claim ~~[[45]]~~44 wherein the status information stored by the dynamic session redirector is used to establish the second session with the storage area network.

47. (currently amended) A method comprising:
establishing at least a first stateful protocol session ~~with~~ between at least one client device and a single system interface;
establishing at least a second stateful protocol session ~~with~~ between a front end device and the single system interface in response to the establishment of the first stateful protocol session; and
redirecting data received from the front end device via the second stateful protocol session to the at least one client device via the first stateful protocol session.

48. (original) The method of Claim 47 wherein the front end device comprises a server connected to one or more data storage resources.

49. (currently amended) The method of Claim 47 further comprising establishing at least a third session with a second front end device in response to the establishment of the first stateful protocol session, and the step of redirecting data further comprises redirecting data received from the second front end device via the third stateful protocol session to the client device via the first stateful protocol session.

50. (currently amended) A method of storing data comprising:
receiving a request at a single system interface from a client device using a stateful protocol;

providing a first communications session with between the client device and the single system interface;

~~accessing~~ creating a second communications session with at least one data storage device in response to ~~[[a]]the request received from the client at the single system interface~~ through the first communications session;

receiving data through the second communications session from the at least one data storage device; and

sending the data to the at least one client device via the first communications session.

51. (currently amended) A data storage system ~~for providing a single system interface for multiple~~ connecting at least two data storage resources to at least one client~~[[s]] connecting to the data storage system across a network via a stateful network protocol~~, the system comprising:

a dynamic session redirector connected to the at least two data storage resources via a first communications means and to the at least one

client via second communications means ~~which~~ wherein the dynamic session redirector receives at least one request ~~requests~~ from the at least one client[[s]] via ~~a first~~ the second communication means using a stateful protocol, ~~and~~

~~a plurality of data storage resources connected to the redirector via a second communication means,~~

wherein the dynamic session redirector is configured to provide a single system interface to the at least one client[[s]] ~~connected to the redirector~~, and is further configured to provide a first communications session across the first communication means in response to ~~[[a]]~~ the at least one request from the at least one client, the dynamic session redirector further configured to provide a second communications session across the second communication means, ~~the redirector configured to~~ and to receive data through the second communications session and to send this data to the at least one client through the first communications session.